DETAILED ACTION

Response to Arguments

This action is response to the communication filed on 10/28/2011. Applicant's arguments regarding prior art rejection have been considered, however they are not persuasive. Applicant argues on page 2 of applicant's response that prior art does not disclose "[sends] a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists." Examiner respectfully disagrees because Murakami clearly discloses that there is a switching circuit (45 of Fig. 4), a switch controller (43 of Fig. 4) and a failure detection part (44 of Fig. 4) that monitors the operating states of the primary and emergency path (42 and 44). In case of failure or primary path, failure detection circuit 44 communicates with the switch controller 43 to switch 45 from primary to secondary path. When primary path restored failure detection circuit 44 communicates with the switch controller 43 to switch 45 from secondary path to primary path (Col. 6; lines 12-33).

Applicant further argues "Indeed, cutting the power to the second relay part in Murakami would cause that part to immediately cease operating. Therefore, modifying Bader according to the teachings of Murakami would cause the "non-transferable" calls remaining on the

secondary circuit of Bader to be dropped immediately. Since Bader teaches, and fundamentally relies on, the ability of the secondary circuit to remain operating until the "non-transferable" calls terminate normally, the proffered modification would render Bader unusable for its intended purpose". Examiner respectfully disagrees because Murakami discloses that secondary path will stop receiving power after it is deactivated (Col. 6; lines 40-41). Based on the prior art disclosure, it is hard to infer that the "non-transferable" calls remaining on the secondary circuit will be dropped immediately.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 8-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bader et al. (US 6542934) in view of Egoshi et al. (US 6163526) and further in view of Murakami et al. (US 5437059).

Regarding claims 8, 18 and 25, Bader discloses to communicate the completion of the secondary traffic circuit activation to the remote agent (Col. 10, lines 1-9; Col. 12,lines 1-15) and to exchange messages with a remote agent associated with a remote transport network element to control activation and deactivation of the secondary traffic circuit (Col. 12, lines 1-15; sending an unquiesce signal to Topology and Route Selection and by sending an unquiesce signal to HPR to initiate a path switch from primary to secondary path) by exchanging messages with a corresponding remote agent associated with a remote transport network element (Col.7, lines 32-42; switching between primary and secondary path is implemented by network control hardware/software. The control hardware/software can be located any where in the network), the agent being further configured to:

switch the traffic selector to receive traffic on the secondary traffic circuit (28 of Fig. 3), and send an Activate message to the remote agent to activate the secondary traffic circuit (Col. 10, lines 1-9) if the secondary traffic circuit is not already activated, responsive to detecting a failure on the primary traffic circuit (Col. 7, lines 50-63; During normal operation there is a possibility that secondary circuit is active even if primary circuit is functional. If the secondary circuit is not active then upon failure of primary traffic circuit, the secondary circuit is activated); and an a RevertRequest message to request the remote agent to deactivate a

previously activated secondary traffic circuit (44 of Fig. 3; Col. 10, lines 55-63; deactivate the secondary path after primary path is restored); switch the traffic selector to receive traffic on the primary traffic circuit (32 of Fig. 3), and sends a Revert message to the remote agent to request the remote agent deactivate the secondary traffic circuit responsive to receiving a RevertRequest message from the remote agent (Col. 11, lines 20-35), response to receiving a Revert Request message from the remote agent (40 of Fig. 3).

Bader does not explicitly disclose sending a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists.

In an analogous art, Murakami discloses sending a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists (Fig. 4; Col. 6, lines 25-47; When detection part 44 detects a failure in primary/relay part 41, the secondary/second relay part 42 is activated and path is switched from primary relay to secondary relay. When detection part 44 detects that the primary relay has been restored then 44 switches path from secondary relay to primary relay and completely deactivate the secondary relay).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Bader's method to add sending a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists.

The motivation as mentioned in Murakami is to improve the restoration process in case of failure in a transmission system (Col. 2, lines 35-40).

Bader in view of Murakami does not explicitly disclose a traffic selector to switch a transport network element between listening to network traffic received over a primary traffic circuit and listening to network traffic received over a secondary traffic circuit; and a split module to send output traffic either to the primary traffic circuit or to the secondary traffic circuit.

In an analogous art, Egoshi discloses a traffic selector (Col. 3, lines 34-35; selector 12) to switch a transport network element between listening to network traffic received over a primary traffic circuit (Col. 3, lines 27-28; working channel line) and listening to network traffic received over a secondary traffic circuit (Col. 3, lines 19-35; protection channel line) a split module (Col. 3, line 44 and Col. 4, lines 20-22; Control unit 109) to send output traffic either to the primary traffic circuit or to the secondary

traffic circuit (Col. 3, lines 36-50); and an agent to switch the traffic selector between the primary traffic circuit and the secondary traffic circuit (Col. 7, lines 13-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Bader in view of Murakami's method to add a traffic selector to switch a transport network element between listening to network traffic received over a primary traffic circuit and listening to network traffic received over a secondary traffic circuit; and a split module to send output traffic either to the primary traffic circuit or to the secondary traffic circuit.

The motivation as mentioned Egoshi is to provide switching from working channel line to protection channel line while avoiding instantaneous cutoff when working channel has failed (Col. 1; lines 12-15).

Regarding claim 9, Bader in view of Murakami and further in view of Egoshi discloses that the agent is configured to detect a failure at an input of the primary traffic circuit (Col. 4, lines 17-22).

Regarding claims 10 and 20, Bader in view of Murakami and further in view of Egoshi discloses that responsive to the agent detecting the failure, the agent is configured to switch the traffic selector to receive the

network traffic over the secondary traffic circuit and send the Activate message if the secondary traffic circuit is not already activated (Bader; Col. 11, lines 20-35).

Regarding claim 11 and 22, Bader in view of Murakami and further in view of Egoshi discloses that that the failure no longer exists, and to switch the traffic selector to receive the network traffic over the primary traffic circuit and send the RevertRequest message to the remote agent responsive to the detection (Bader; Col. 12, lines 44-56).

Regarding claims 12 and 23, Bader in view of Murakami and further in view of Egoshi discloses that receiving a RevertRequest message at the first transport network element from the second transport network element (Bader; lines 55-60); and sending a Revert message to the second transport network element to deactivate the secondary traffic circuit if the sub-network connection protection mechanism is in the NoRequest status (Bader; Col. 10, lines 60-62).

Regarding claims 13, 14 and 15, Bader in view of Murakami and further in view of Egoshi discloses that the agent comprises logic to implement a sub-network connection protection mechanism having a

NoRequest state (Col. 6, lines 38-45; if there is no channel line failure then no signal is sent to indicate a failure) / the logic entering the NoRequest state indicates that no failure is detected at the input of the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the primary traffic circuit (Col. 8, lines 32-39; Col. 2, lines 40-47; if there is no failure then the selector will select the working channel i.e. primary traffic circuit) and a AutoSwitch state/ wherein the logic entering the AutoSwitch state
indicates that a failure has been detected at the input to the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the secondary traffic circuit (Col. 4, lines 10-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Bader 's system to have that the agent comprises logic to implement a sub-network connection protection mechanism having a NoRequest state/ the logic entering the NoRequest state indicates that no failure is detected at the input of the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the primary traffic circuit and a AutoSwitch state/ wherein the logic entering the AutoSwitch state indicates that a failure has been detected at the input to the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the secondary traffic circuit, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claims 16 and 24, Bader in view of Murakami and further in view of Egoshi discloses that the agent is configured to switch the sub-network connection protection mechanism to the NoRequest State responsive to receiving a Revert message from a remote agent/the second network element (Col. 4, lines 15-17; traffic is output on primary traffic circuit in response to the alarm indication received by the control unit, if alarm does not show any failure then traffic is output to the working channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Badar's system to add that the agent is configured to switch the sub-network connection protection mechanism to the NoRequest State responsive to receiving a Revert message from a remote agent/the second network element, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 17, Bader in view of Egoshi further discloses that the network comprises a Synchronous Digital Hierarchy (SDH) transport network (Egoshi; Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Badar's system to add that the network comprises a Synchronous Digital Hierarchy (SDH) transport network.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 19, Bader discloses detecting a failure at an input to a primary traffic circuit associated with the first transport network element (Badar; 22 of Fig. 3).

Activating a sub-network connection protection mechanism at the first network activating a sub-network connection protection mechanism at the first transport network element responsive to detecting the failure (Bader; Col. 8, lines 1-7), the sub-network connection protection mechanism assuming:

Bader in view of Murakami does not explicitly disclose a NoRequest state; if there is no channel line failure then no signal is sent to indicate a

failure to indicate that no failure is detected at the primary traffic circuit and that the first transport network element is configured to receive the network traffic over the primary traffic circuit and an AutoSwitch state to indicate that a failure has been detected at the primary traffic circuit and that first transport network element is configured to receive the network traffic over the secondary traffic circuit.

In an analogous art, Egoshi discloses a NoRequest state (Egoshi; Col. 6, lines 38-45; if there is no channel line failure then no signal is sent to indicate a failure to indicate that no failure is detected at the primary traffic circuit and that the first transport network element is configured to receive the network traffic over the primary traffic circuit (Egoshi; Col. 8, lines 32-39; Col. 2, lines 40-47; if there is no failure then the selector will select the working channel i.e. primary traffic circuit) and an AutoSwitch state to indicate that a failure has been detected at the primary traffic circuit and that first transport network element is configured to receive the network traffic over the secondary traffic circuit (Egoshi; Col. 4, lines 10-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Bader's method to have a NoRequest state to indicate that no failure is detected at the primary traffic circuit, and that the first transport network element is configured to receive network traffic over the primary traffic circuit; and an AutoSwitch state to

indicate that a failure has been detected at the primary traffic circuit, and that the first transport network element is configured to receive the network traffic over the secondary traffic circuit, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 21, Bader in view of Murakami and further in view of Egoshi discloses that switching the sub-network connection protection mechanism to the AutoSwitch state responsive to detecting an error (Bader; Col. 11, lines 30-35);

switching a traffic selector at the first network element to receive the network traffic over the secondary traffic circuit (Col. 11, lines 27-30); and

sending the Activate message (Bader; Col 11, lines 23-26).

Regarding claim 26, Bader in view of Murakami and further in view of Egoshi discloses that wherein the agent comprises logic to implement a sub-network connection protection function having a NoRequest state (Bader; 20 and 22 of Fig. 3; when there is no failure in Primary Path then there is no request for implementation of secondary path) and a AutoSwitch state (Bader; 22 of Fig. 3; Col. 8, lines 34-43; when there is a failure in Primary Path then automatically switch to secondary path), and wherein: the sub-network

connection protection function, upon entering the NoRequest state, indicates that no failure is detected at an input of the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the primary traffic circuit (Bader; 20 and 22 of Fig. 3;); and the sub-network connection protection function, upon entering the AutoSwitch state, indicates that a failure has been detected at the input to the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the secondary traffic circuit (Bader; 22 and 24; Col. 7, lines 58-62; Activate Secondary Path after detection of failure in Primary Path).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMINA CHOUDHRY whose telephone number is (571)270-7102. The examiner can normally be reached on Monday to Thursday (7:30 a.m. to 5.00p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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02/21/2012

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